

What is claimed is:

1. A home network system, comprising:
a home master device connected to a plurality of home appliances; and
5 a remote control server connected to the home master device through a first network, for transmitting/receiving a message between a user terminal and the home master device,
wherein the message transmitted/received between the home master device and the remote control server comprises at least a product code unit of the
10 corresponding home appliance, a message code unit for notifying a transmission/reception direction of the message, parameter units under the definition of the message, and a number unit of parameters.
2. The system of claim 1, wherein the product code unit comprises a
15 product ID code and a logical address of the home appliance.
3. The system of claim 2, wherein the product ID code and the logical address of the product code unit are formed without an empty space.
- 20 4. The system of any one of claims 1 to 3, wherein the product code unit comprises at least characters.
5. The system of claim 1, wherein the message code unit comprises numbers.
- 25 6. The system of claim 1, wherein the message code unit comprises at

least one of a first code region for displaying a message from the home master device to the remote control server, and a second code region for displaying a message from the remote control server to the home master device.

5 7. The system of claim 6, wherein the first code region and the second code region do not overlap with each other.

8. The system of claim 1 or 6 , wherein the first and second code regions comprise numbers.

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9. The system of claim 1, wherein the product code unit, the message code unit, the parameter units and the number unit of the parameters are distinguished by predetermined delimiters.

15 10. The system of claim 1 or 9, wherein the message sequentially comprises the product code unit, the message code unit, the number unit of the parameters, and the parameter units.

11. The system of claim 1, wherein the message is a message for basic
20 communication.

12. The system of claim 11, wherein the basic communication comprises at least one of login request and response, a dummy message, and logout request and response.

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13. The system of claim 1, wherein each of the parameter units comprises

a user ID code unit, an internet operation program code command unit for identifying the home appliance, a command unit for the home appliance, return argument units, and a number unit of return arguments.

5 14. The system of claim 13, wherein each of the parameter units sequentially comprises the user ID code unit, the internet operation program code command unit, the command unit for the home appliance, the number unit of the return arguments, and the return argument units.

10 15. The system of claim 13 or 14, wherein the user ID code unit, the internet operation program code command unit, the command unit for the home appliance, the number unit of the return arguments and the return argument units are distinguished by predetermined delimiters.

15 16. The system of claim 13, wherein the message is a message for monitoring the home appliance.

 17. The system of claim 13, wherein the user ID code unit comprises characters.

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 18. The system of claim 13, wherein the internet operation program code command unit comprises a recognition code for an internet operation program, a product ID code and a command.

25 19. The system of claim 18, wherein the internet operation program code command unit has a type of 'recognition code=product ID code_command'.

20. The system of claim 13, wherein the command unit for the home appliance comprises a factor name and a factor value of the command.

5 21. The system of claim 20, wherein the command unit for the home appliance has a type of 'factor name=factor value'.

22. The system of claim 13, wherein each of the return argument units comprises a return argument name and a factor value.

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23. The system of claim 22, wherein each of the return argument units has a type of 'name=factor value'.

24. The system of claim 22 or 23, wherein each of the return argument
15 units further comprises a byte number of the factor value.

25. The system of claim 1, wherein each of the parameter units comprises a user ID code unit, a destination IP unit of the home master device, an internet operation program code command unit for identifying the home appliance, a
20 command unit for the home appliance, argument units, and a number unit of arguments.

26. The system of claim 25, wherein each of the parameter units sequentially comprises the user ID code unit, the destination IP unit, the internet
25 operation program code command unit, the command unit for the home appliance, the number unit of the arguments, and the argument units.

27. The system of claim 25 or 26, wherein the user ID code unit, the destination IP unit, the internet operation program code command unit, the command unit for the home appliance, the number unit of the arguments and the
5 argument units are distinguished by predetermined delimiters.

28. The system of claim 25 or 26, wherein the message is a control message for the home appliance.

10 29. The system of claim 25 or 26, wherein each of the parameter units further comprises a language unit for displaying a kind of a language.

30. The system of claim 29, wherein the language unit is included between the destination IP unit and the internet operation program code command
15 unit.

31. The system of claim 25, wherein the user ID code unit comprises characters.

20 32. The system of claim 25, wherein the internet operation program code command unit comprises a recognition code for an internet operation program, a product ID code and a command.

33. The system of claim 32, wherein the internet operation program code
25 command unit has a type of 'recognition code=product name_command'.

34. The system of claim 25, wherein the command unit for the home appliance comprises a factor name and a factor value of the command.

35. The system of claim 34, wherein the command unit for the home
5 appliance has a type of 'factor name=factor value'.

36. The system of claim 25, wherein each of the argument units comprises an argument name and a factor value.

10 37. The system of claim 36, wherein each of the argument units has a type of 'name=factor value'.

38. The system of claim 36 or 37, wherein each of the argument units further comprises a byte number of the factor value.

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39. The system of claim 1, wherein the message further comprises an ID code of the user terminal.

40. A storage medium for recording a message in a home network system,
20 the home network system including a home master device connected to a plurality of home appliances, and a remote control server connected to the home master device through a first network, for transmitting/receiving a message between a user terminal and the home master device, the message used for the home network system comprising at least a product code unit of the corresponding home
25 appliance, a message code unit for notifying a transmission/reception direction of the message, parameter units under the definition of the message, and a number

unit of parameters.

41. The storage medium of claim 40, wherein the product code unit comprises a product ID code and a logical address of the home appliance.

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42. The storage medium of claim 41, wherein the product ID code and the logical address of the product code unit are formed without an empty space.

43. The storage medium of any one of claims 40 to 42, wherein the
10 product code unit comprises at least characters.

44. The storage medium of claim 40, wherein the message code unit comprises numbers.

15 45. The storage medium of claim 40, wherein the message code unit comprises at least one of a first code region for displaying a message from the home master device to the remote control server, and a second code region for displaying a message from the remote control server to the home master device.

20 46. The storage medium of claim 45, wherein the first code region and the second code region do not overlap with each other.

47. The storage medium of claim 40 or 45 , wherein the first and second code regions comprise numbers.

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48. The storage medium of claim 40, wherein the product code unit, the

message code unit, the parameter units and the number unit of the parameters are distinguished by predetermined delimiters.

49. The storage medium of claim 40 or 48, wherein the message
5 sequentially comprises the product code unit, the message code unit, the number unit of the parameters, and the parameter units.

50. The storage medium of claim 40, wherein each of the parameter units
comprises a user ID code unit, an internet operation program code command unit
10 for identifying the home appliance, a command unit for the home appliance, return argument units, and a number unit of return arguments.

51. The storage medium of claim 50, wherein each of the parameter units
sequentially comprises the user ID code unit, the internet operation program code
15 command unit, the command unit for the home appliance, the number unit of the return arguments, and the return argument units.

52. The storage medium of claim 50 or 51, wherein the user ID code unit,
the internet operation program code command unit, the command unit for the
20 home appliance, the number unit of the return arguments and the return argument units are distinguished by predetermined delimiters.

53. The storage medium of claim 50, wherein the user ID code unit
comprises characters.

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54. The storage medium of claim 50, wherein the internet operation

program code command unit comprises a recognition code for an internet operation program, a product ID code and a command.

55. The storage medium of claim 54, wherein the internet operation
5 program code command unit has a type of 'recognition code=product ID code_command'.

56. The storage medium of claim 50, wherein the command unit for the home appliance comprises a factor name and a factor value of the command.
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57. The storage medium of claim 56, wherein the command unit for the home appliance has a type of 'factor name=factor value'.

58. The storage medium of claim 50, wherein each of the return argument
15 units comprises a return argument name and a factor value.

59. The storage medium of claim 58, wherein each of the return argument units has a type of 'name=factor value'.

20 60. The storage medium of claim 58 or 59, wherein each of the return argument units further comprises a byte number of the factor value.

61. The storage medium of claim 40, wherein each of the parameter units comprises a user ID code unit, a destination IP unit of the home master device, an
25 internet operation program code command unit for identifying the home appliance, a command unit for the home appliance, argument units, and a number unit of

arguments.

62. The storage medium of claim 61, wherein each of the parameter units sequentially comprises the user ID code unit, the destination IP unit, the internet
5 operation program code command unit, the command unit for the home appliance, the number unit of the arguments, and the argument units.

63. The storage medium of claim 61 or 62, wherein the user ID code unit, the destination IP unit, the internet operation program code command unit, the
10 command unit for the home appliance, the number unit of the arguments and the argument units are distinguished by predetermined delimiters.

64. The storage medium of claim 61 or 62, wherein each of the parameter units further comprises a language unit for displaying a kind of a language.

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65. The storage medium of claim 64, wherein the language unit is included between the destination IP unit and the internet operation program code command unit.

20 66. The storage medium of claim 61, wherein the user ID code unit comprises characters.

67. The storage medium of claim 61, wherein the internet operation program code command unit comprises a recognition code for an internet
25 operation program, a product ID code and a command.

68. The storage medium of claim 67, wherein the internet operation program code command unit has a type of 'recognition code=product name_command'.

5 69. The storage medium of claim 61, wherein the command unit for the home appliance comprises a factor name and a factor value of the command.

70. The storage medium of claim 69, wherein the command unit for the home appliance has a type of 'factor name=factor value'.

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71. The storage medium of claim 61, wherein each of the argument units comprises an argument name and a factor value.

72. The storage medium of claim 71, wherein each of the argument units
15 has a type of 'name=factor value'.

73. The storage medium of claim 71 or 72, wherein each of the argument units further comprises a byte number of the factor value.

20 74. The storage medium of claim 40, wherein the message further comprises an ID code of the user terminal.